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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,974	03/03/2000	Steven V. Larson	13661-107	5719

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EXAMINER

STRIMBU, GREGORY J

ART UNIT	PAPER NUMBER
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3634

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,974

Applicant(s)

LARSON, STEVEN V.

Examiner

Gregory J. Strimbu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/21/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Drawings

The corrected or substitute drawings received on August 29, 2001 have been approved.

Claim Rejections - 35 USC § 112

Claims 1-17 and 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "commercial building" on line 2 of claim 2 render the claims indefinite because it is unclear what comprises a commercial building. Is a commercial building structurally different from a non-commercial building? Can a residential house become a commercial building if part of the house is used for a "home office"? Does a building comprise a commercial building if part of the building is used for government or non-profit work? What comprises a building? What structure is required for a building? Does a shed for storing yard material comprise a building? Does a hanger for storing commercial aircraft comprise a building? Recitations such as "a hinged door engaging the frame" on line 4 of claim 1 render the claims indefinite because it is unclear how the door is engaging the frame when the door is in an open position. It is suggested that the applicant change recitations such as "a hinged door engaging the frame" to --a hinged door engagable with the frame-- to avoid confusion.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Odell et al. Odell et al. discloses a door 22 and frame 103 in combination with an air handling unit, i.e., the aircraft, wherein the door and frame can withstand a pressure differential of greater than six inches of air pressure. Since the interior cabin of an aircraft provides air to the passengers therein, it comprises an air handling unit.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow. The admitted prior art in figure 1 discloses an air handling unit comprising, a hinged door (D) engaging the air handling unit and comprising a front wall (not numbered, but shown in figure 1) and side walls (not shown) and a rear wall (not shown) with an insulating material (see page 2, lines 16-17), a gasket (not shown), the

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hinged door and air handling unit are capable of withstanding a pressure differential of up to six inches of air pressure (see page 2, lines 18-19). The admitted prior art is silent concerning a frame, a gasket with anti-roll extensions and a hollow core.

However, McDonald discloses a door and frame combination, the combination comprising a frame 10, a hinged door 56 engaging the frame, the door 56 further comprising a front wall (not numbered), rear wall (not numbered), and side walls (not numbered) enclosing a hollow core (not numbered) and insulting material 66 filling the hollow core. The insulating material is an expanding polyurethane foam. As shown in figure 1, the door includes a window (not numbered) (claim 8).

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a frame, and a hollow core and insulating material, as taught by McDonald, to increase the insulating value and strength of the door when in the closed position.

Additionally, Ryan et al. discloses a gasket 10 for sealing between a door and a door frame wherein the gasket includes anti-roll extensions 15-17, 20 and 21 and has a central hollow core.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a anti-roll extensions, as taught by Ryan et al., to improve the seal between the door and the door frame.

Finally, Gamow discloses a seal (not numbered, but see column 4, lines 6-9) capable of withstanding a pressure differential of greater than 6 inches of pressure.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with a seal capable of withstanding a pressure differential greater than 6.5 inches, as taught by Gamow, to prevent air from moving between the door and door frame during high pressure differential situations.

With respect to claims 3 and 10, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4, 8-11 and 15 above, and further in view of Colliander. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

With respect to claim 20, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is

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expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 6, 7, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4, 8-11 and 15 above, and further in view of Jansen.

Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

Claims 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4, 8-11 and 15 above, and further in view of Colliander and Jansen. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

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It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Moreover, Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

With respect to claim 20, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Response to Arguments

Applicant's arguments filed April 21, 2005 have been fully considered but they are not persuasive.

With respect to the applicant's comments concerning claim 21, the examiner respectfully disagrees. Claim 21 has been amended to recite that the applicant intends to use the combination of a door and frame and air handling unit with a commercial building. Therefore, in order for O'dell et al. to anticipate the applicant's claimed invention, the invention of O'dell et al. only need be capable of being used with a commercial building. Since a hanger for the maintenance of commercial aircraft comprises a commercial building and the aircraft can be "parked" in said hanger for maintenance, the invention of O'dell et al. can be used with commercial building.

With respect to the applicant's comments concerning the combination of McDonald, Ryan et al. and Gamow, the examiner respectfully disagrees. The admitted prior art of figure 1 is disclosed as being used with a commercial building. See lines 2-3 of page 2. Additionally, Gamow is analogous art because both the applicant and Gamow were concerned with the particular problem of preventing air from moving from an ambient high pressure between a hinged door and a frame to interior having a lower pressure than the ambient pressure. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992) where the court held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. The applicant comments concerning Shirashi are not pertinent since Shirashi has not been used the rejection.

Conclusion

THIS ACTION IS NOT MADE FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory J. Strimbu
Primary Examiner
Art Unit 3634
April 27, 2005